What is claimed is:

1. A solid-state imaging element, comprising:

a plurality of light-receiving sensors converting optical signals to electrical signals; and

a memory storing the electrical signals as optical image data, said memory being formed of a plurality of line buffers.

2. The solid-state imaging element of claim 1, further comprising:

a first switch circuit connecting one of the line buffers and said light-receiving sensors.

3. The solid-state imaging element of claim 2, wherein the data in the line buffers are output in parallel.

4. The solid-state imaging element of claim 1, further comprising:

a second switch circuit selecting one of the line buffers to output the electrical signal.

5. A solid-state imaging element, comprising:

a plurality of light receiving sensors arranged as m sensors in each of n lines to convert optical signals to electrical signals; and

a memory storing the electrical signals as optical image data, said memory being formed of a plurality of buffers, each buffer storing m data.

6. The solid-state imaging element of claim 5, further comprising:

a switch circuit connecting one of the buffers and said light-receiving sensors.

7. The solid-state imaging element of claim 6, further comprising:

a transfer control circuit selecting certain ones of said light-receiving sensors to supply the electrical signal to the buffers.

8. An image processor, comprising:

a solid-state imaging element comprising a plurality of light receiving sensors to convert optical signals to electrical signals;

an encoder encoding the electrical signals in units of n x m pixels; and

an electrical signal holder within said solid-state imaging element comprising line buffers.

9. The image processor of claim 8, further comprising:

a first switch circuit connecting one of the line buffers and the light receiving sensors.

10. The image processor of claim 9, wherein data in the line buffers are output in parallel.

11. The image processor of claim 8, further comprising:

a second switch circuit selecting one of the line buffers and outputting an electrical signal thereto.

12. The image processor of claim 8, wherein said encoder is a JPEG encoder.

13. An image processor, comprising:

a solid-state imaging element having a plurality of light-receiving sensors to convert optical signals into electrical signals;

a code encoder encoding the electrical signals in units of n x m pixels; and

an electrical signal holder within said solid-state imaging element comprising a plurality of buffers, each buffer storing m data.

14. The image processor of claim 13, further comprising:

a switch circuit connecting one of the buffers and the light-receiving sensors.

15. The image processor of claim 13, further comprising:

a transfer control circuit selecting certain ones of the light-receiving sensors to supply an electrical signal to the buffers.

16. The image processor of claim 13, wherein said code encoder is a JPEG encoder.

17. An image processing method, comprising:

converting optical signals to electrical signals in a plurality of light-receiving sensors;

outputting the electrical signals in units of n x m blocks of pixels; and

encoding the electrical signals.

18. A charge-coupled device (CCD), comprising:

a vertical CCD having a plurality of photosensors arranged in v vertical lines and n horizontal lines corresponding to an n x v frame of pixels, and converting optical signals to electrical signal image data;

a horizontal CCD having n line buffers, each buffer holding up to v pixels of image data;

a first switch circuit connected to each of the vertical lines and the line buffers;

a first switch control circuit controlling said first switch circuit so that each line buffer sequentially connects to said vertical CCD, the image data in sequential ones of the n horizontal lines of said vertical CCD being transferred to a corresponding one of the n line buffers;

a second switch circuit connected to the line buffers and an external circuit; and

a second switch control circuit controlling said second switch circuit so that each line buffer sequentially connects to the external circuit, the image data in the line buffers being transferred to the external circuit in blocks of n x m ($m < v$) pixels, each line buffer in each block transferring m pixels.

19. A charge-coupled device (CCD), comprising:

a vertical CCD having a plurality of photosensors arranged in v vertical lines and n horizontal lines corresponding to an n x v frame of pixels, each horizontal line being divided into k line sections, each line section corresponding to m ($m < k$) pixels of image data, and converting optical signals to electrical signal image data;

a horizontal CCD having k line buffers connected to an external circuit, each line buffer holding up to m pixels of image data;

a switch circuit connected to the line buffers and the external circuit;

a transfer control circuit controlling said vertical CCD such that blocks of n x m pixels of image data are transferred from said vertical CCD to the line buffers, wherein a

first one of the buffers receives m pixels from a horizontal line and outputs the m pixels to the external circuit before receiving another m pixels from the next horizontal line and so forth until a first block of n x m pixels has been transferred and output, and repeating the transfer and output operations for each remaining line buffer and the remaining image data; and

a switch control circuit controlling said switch circuit so that each line buffer sequentially connects to the external circuit to output the image data to the external circuit.

20. A charge-coupled device (CCD), comprising:

a vertical CCD having a plurality of photosensors arranged in v vertical lines and n horizontal lines corresponding to an n x v frame of pixels, and converting optical signals to electrical signal image data;

a horizontal CCD having n line buffers, each buffer holding up to v pixels of image data;

a switch circuit connected to each of the vertical lines and the line buffers; and

a switch control circuit controlling said switch circuit so that each line buffer sequentially connects to said vertical CCD, the image data in sequential ones of the n horizontal lines of said vertical CCD being transferred to a corresponding one of the n line buffers, and the image data in the n line buffers being output in parallel to the external circuit.

21. A charge-coupled device (CCD), comprising:

an array of photosensors arranged in v vertical lines and n horizontal lines corresponding to an n x v pixel array of image data; and

a plurality of n line buffers, each line buffer holding up to v pixels of image data,

wherein each line buffer sequentially connecting to said array, the image data in sequential ones of the n horizontal lines of said array being transferred to a corresponding one of the n line buffers, and each line buffer sequentially outputting the image data, the image data in the line buffers being output in blocks of n x m ($m < v$) pixels, each line buffer in each block outputting m pixels.

22. A charge-coupled device (CCD), comprising:

an array of photosensors arranged in v vertical lines and horizontal lines corresponding to an n x v pixel array of image data, each horizontal line being divided into k line sections, each line section corresponding to m ($m < k$) pixels of image data; and

a plurality of k line buffers, each line buffer holding up to m pixels of image data,

wherein blocks of n x m pixels of image data are transferred from the array of photosensors to the line buffers, such that a first one of the buffers receives m pixels from a horizontal line and outputs the m pixels before receiving another m pixels from the next

horizontal line and so forth until a first block of n x m pixels has been transferred and output, and repeating the transfer and output operations for each remaining line buffer and the remaining image data.

23. A charge-coupled device (CCD), comprising:

an array of photosensors arranged in v vertical lines and n horizontal lines corresponding to an n x v pixel array of image data; and

a plurality of n line buffers, each line buffer holding up to v pixels of image data,

wherein each line buffer sequentially connecting to said array, the image data in sequential ones of the n horizontal lines of said array being transferred to a corresponding one of the n line buffers, the image data in the n line buffers being output in parallel.

24. A method of outputting image data from a charge-coupled device (CCD), comprising:

arranging a plurality of photosensors in v vertical lines and n horizontal lines corresponding to an n x v pixel array of image data;

connecting, sequentially, each one of a plurality of n line buffers to the array of photo sensors, each line buffer holding up to v pixels of image data, and transferring the image data in sequential ones of the n horizontal lines of the array to a corresponding one of the n line buffers; and

outputting, sequentially, the image data of each line buffer, the image data in the line buffers being output in blocks of n x m ($m < v$) pixels, each line buffer in each block outputting m pixels.

25. A method of outputting image data from a charge-coupled device (CCD), comprising:

arranging a plurality of photosensors in v vertical lines and n horizontal lines corresponding to an n x v pixel array of image data;

dividing each horizontal line into k line sections, each line section corresponding to m ($m < k$) pixels of image data;

transferring blocks of n x m pixels of image data from the array of photosensors to a plurality of k line buffers, each line buffer holding up to m pixels of image data, such that a first one of the buffers receives m pixels from a horizontal line and outputs the m pixels before receiving another m pixels from the next horizontal line and so forth until a first block of n x m pixels has been transferred and output, and repeating the transfer and output operations for each remaining line buffer and the remaining image data.

26. A method of outputting image data from a charge-coupled device (CCD), comprising:

arranging a plurality of photosensors in v vertical lines and n horizontal lines corresponding to an n x v pixel array of image data; and

connecting, sequentially, each one of a plurality of n line buffers to the array of photo sensors, each line buffer holding up to v pixels of image data, and transferring the image data in sequential ones of the n horizontal lines of the array to a corresponding one of the n line buffers, and outputting the image data in the n line buffers in parallel.